

Projections 2016

New Jersey Employment and Population in the 21st Century

November 2008

**Division of Labor Market and
Demographic Research**

NEW JERSEY DEPARTMENT OF

LWD

LABOR AND WORKFORCE DEVELOPMENT
nj.gov/labor

**Jon S. Corzine
Governor**

**David J. Socolow
Commissioner**

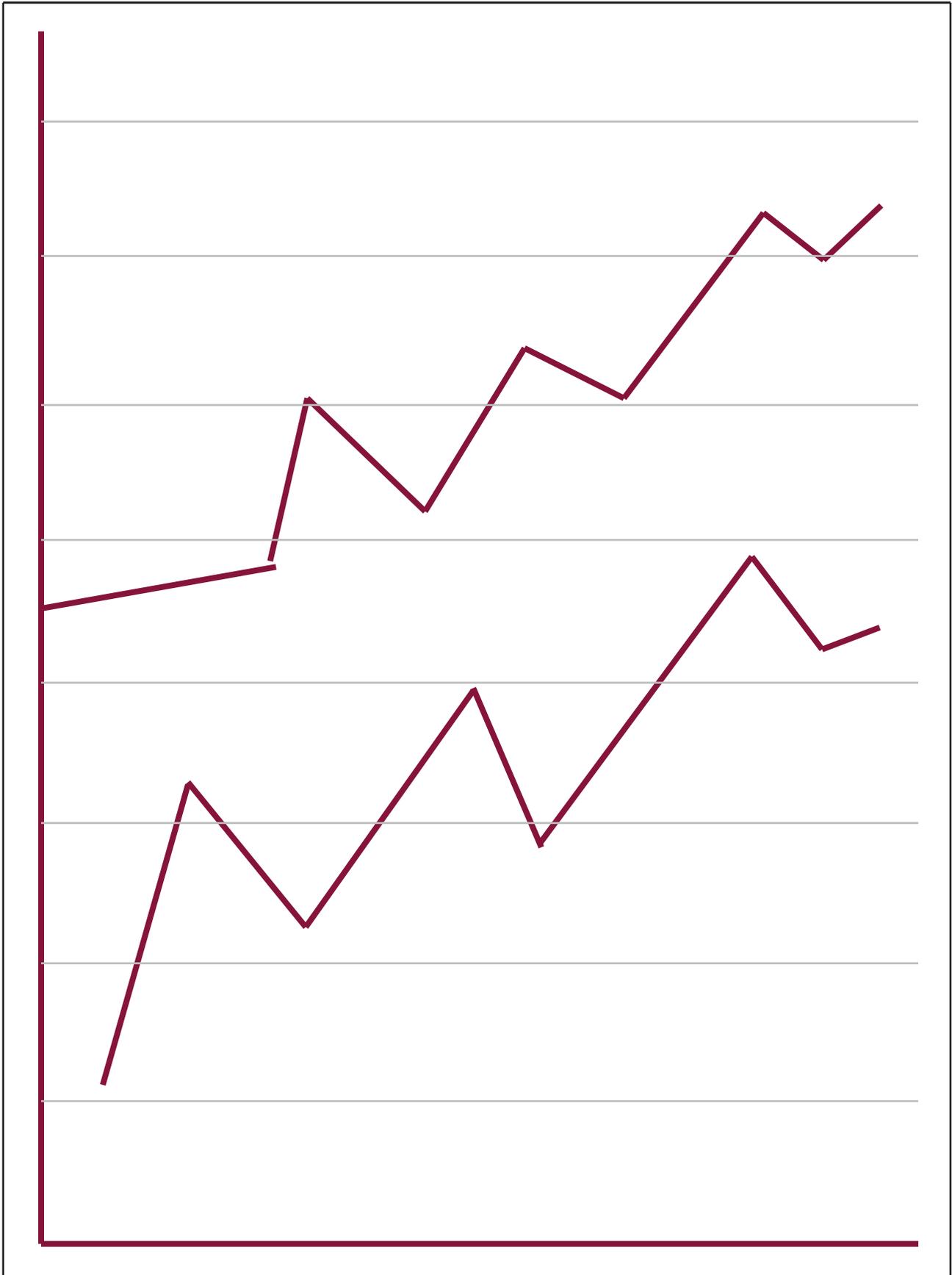
2016 PROJECTIONS

Table of Contents

Introduction.....	1
Industry Projections.....	2
Occupational Projections.....	4
Population Projections.....	8
Labor Force Projections.....	10
Appendix.....	13
Methodology.....	24

For additional copies of this publication, please contact JoAnne Caramelo at the New Jersey Department of Labor and Workforce Development, PO Box 057, Trenton, NJ 08625-0057, phone: (609)292-2582 or e-mail: joanne.caramelo@dol.state.nj.us

2016 PROJECTIONS



2016 PROJECTIONS

Introduction

Projections 2016 represents the latest long-term projections of population, labor force, and employment both by industry and occupation for New Jersey. These projections, which are neither predictions nor forecasts, reflect long-term economic and demographic trends. In other words, the projections are an extrapolation of current and expected longer-term future trends. These projections do not take into account any current or future policy initiatives. Moreover, exogenous shocks, such as a natural disaster, a war or a terrorist attack, could cause the economy to deviate from these trends.

These projections were developed by staff in the New Jersey Department of Labor and Workforce Development's Division of Labor Market and Demographic Research, part of the Office of Labor Planning and Analysis. Jason Timian, with oversight from Robert Vaden, was responsible for the development of the industry and occupational employment projections. Dr. Sen-Yuan Wu developed the population and labor force projections.

This publication is designed to present highlights of the four projection series (population, labor force and employment by both industry and occupation) in a user-friendly format. These projections are widely used by various public and private organizations in their economic development efforts, transportation planning and workforce development, including the identification of labor demand occupations and the design and implementation of job training programs. The occupational employment projections are used extensively in career guidance.

The industry employment projections in this report are based on the North American Industry Classification System (NAICS) for classifying employment by industry. NAICS replaces the old manufacturing-oriented Standard Industrial Classification (SIC) and is representative of the service-based, technology-driven information economy in which we live.

More detailed projections of population, labor force and employment by both industry and occupation are available on the Office of Labor Planning and Analysis Web site <http://www.nj.gov/labor/lra>. For more information, contact Jason Timian (industry and occupational employment projections) or Dr. Sen-Yuan Wu (population and labor force projections) at the New Jersey Department of Labor and Workforce Development. Mr. Timian may be reached at (609)777-3635 or by e-mail at jason.timian@dol.state.nj.us. Dr. Wu may be reached at (609)292-0077 or by e-mail at sywu@dol.state.nj.us.

2016 PROJECTIONS

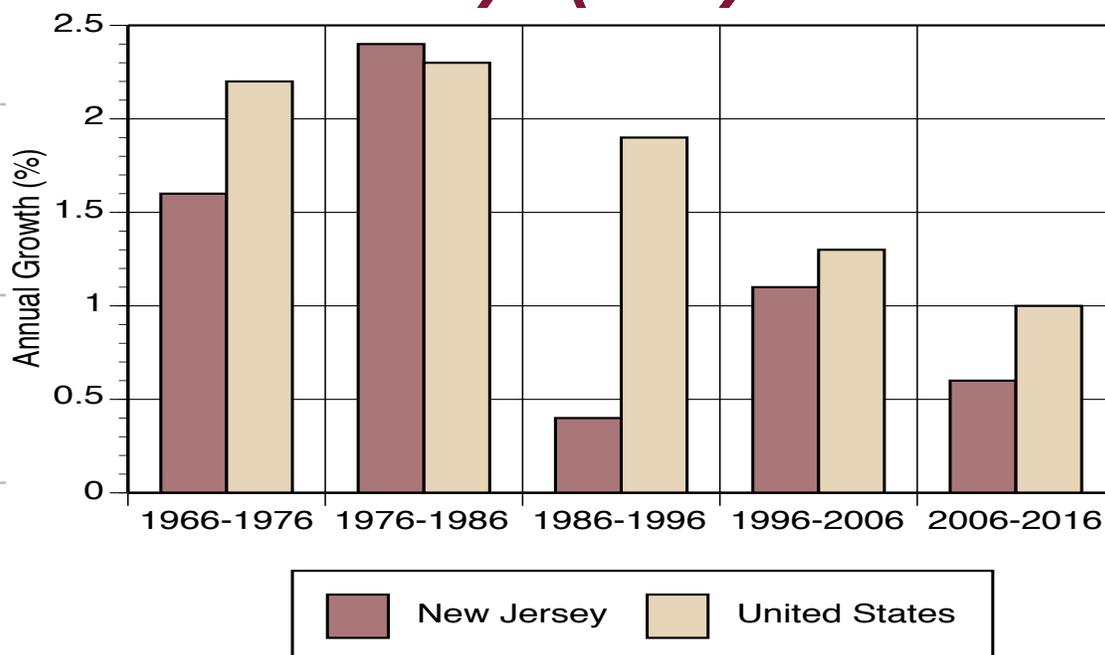
New Jersey Will Have Slower-Than-National Employment Growth

Over the 2006-2016 period, New Jersey is projected to add 265,400 jobs while growing at an annual rate of 0.6 percent. National growth is projected to average 1.0 percent annually.

Projected New Jersey job growth is expected to be slower than over the previous ten-year period, 1996-2006, when growth averaged 1.1 percent annually and 432,100 new jobs were created. This period benefitted from the extremely fast employment growth of the late 1990s.

The most new jobs, 734,400, were added over the 1976-1986 period. This period also had the fastest growth, averaging 2.3 percent annually. The slowest growth, 0.4 percent, occurred in the 1986-1996 period.

Employment Growth US and NJ: 1966-2016



2016 PROJECTIONS

What Industries Will Produce the Most Jobs?

Three industry sectors will account for over 85.0 percent of New Jersey's total employment growth.

Industry Employment Growth NJ: 2006-2016

Industry Category	2006-2016 Employment Growth	Percentage of Total Growth
Health Care and Social Assistance	100,400	39.5
Professional and Business Services	78,200	30.8
Leisure and Hospitality	38,200	15.0
Total for Three Industries	216,800	85.3

By 2016, almost three-quarters of employment will be in a Private service-providing industry, up from 71.8 percent in 2006.

Manufacturing is projected to lose 62,500 jobs by 2016, just under 20 percent of the 2006 base year total.

Construction employment will rebound from the weakness in residential construction resulting from the subprime mortgage crisis. Growth will, however, be more in line with long-term trends.

2016 PROJECTIONS

Strong Growth Projected in Health Services

Health services is projected to account for four in every ten new jobs in New Jersey through 2016. A large baby boom population with increasing life expectancies and improved medical technology are the primary reasons for continued fast growth in health services.

Job growth in ambulatory health care will account for over half of all growth within health services. Hospitals are expected to account for less than four percent of total health services growth.

Health Services Employment Growth NJ: 2006-2016

Health Services Category	2006-2016 Employment Growth	Percent of Industry
Ambulatory Health Care	52,500	52.3
Hospitals	3,800	3.8
Nursing and Residential Care	19,300	19.2
Social Assistance	24,800	24.7
Total Growth	100,400	100.0

2016 PROJECTIONS

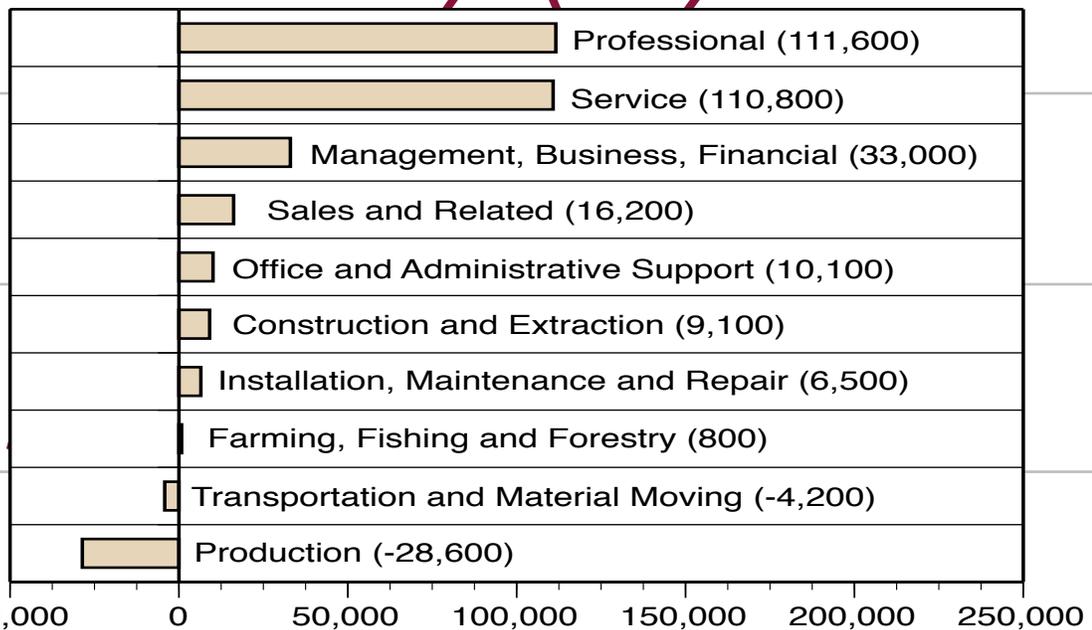
Employment Growth by Occupation

Employment growth through 2016 will be overwhelmingly dominated by growth in two occupational groups: professional and related occupations and service occupations. These two major groups together will account for approximately 84.0 percent of net projected employment growth and are each expected to add over 110,000 new jobs.

Office and administrative support occupations, though still significant with 2006 employment of almost 800,000, are projected to add only 10,000 jobs. Increases in office automation and new technologies have sharply reduced employment growth in this large occupational group.

Production occupations will decrease as the manufacturing sector is expected to suffer continuing employment declines.

Employment Change by Occupational Category: 2006-2016



2016 PROJECTIONS

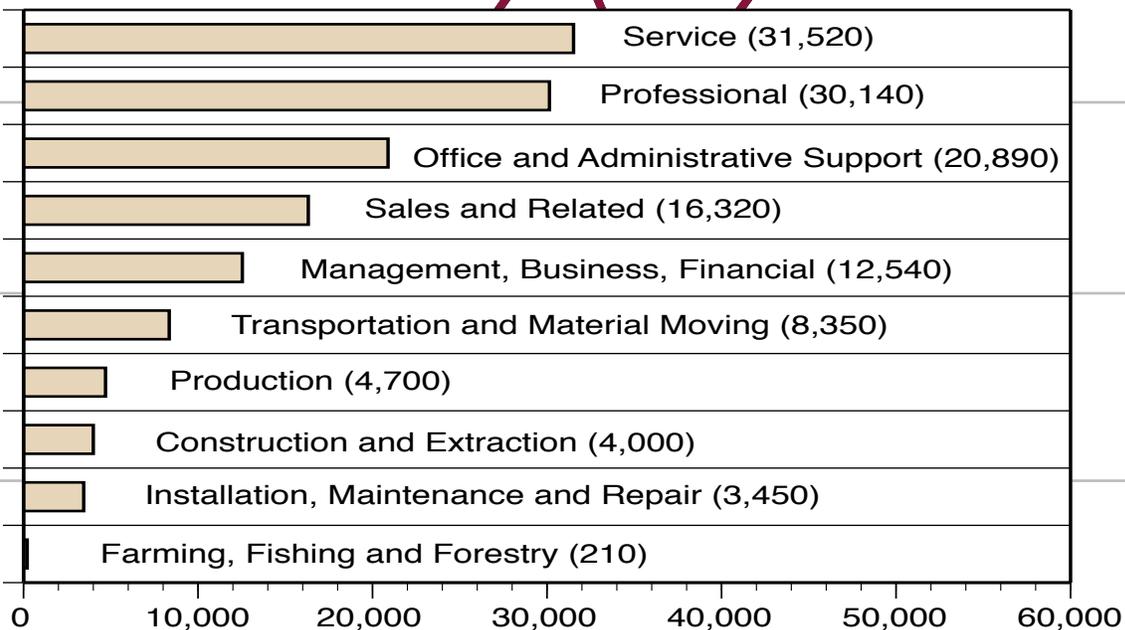
Annual Projected Job Openings by Major Occupational Group

Approximately 132,100 job openings are expected each year in New Jersey over the 2006-2016 period. Of these, only 30 percent will be due to employment growth while the vast majority will be due to replacement demands.

Two occupational groups, service (31,500 openings) and professional and related (30,100 openings) will lead the state in job openings and together will account for almost half of the state's annual job openings.

Office and administrative support occupations, despite slow employment growth, will rank third in total job openings due to a high level of replacement demand.

Average Annual Job Openings by Occupational Category: 2006-2016



2016 PROJECTIONS

Annual Projected Employment Growth and Job Openings by Educational Attainment

Almost half of all **new jobs** are in occupations requiring at least an Associate's degree while only one third of new jobs are in occupations that have low education and training requirements.

Nearly 30 percent of **job openings** are for occupations requiring an Associate's degree or higher. Over half, 53.8 percent, are for jobs in occupations having the lowest training and education requirements.

A disproportionate number of job openings are for workers in occupations having moderate or low education and training requirements. These occupations tend to have higher replacement demands than occupations with higher requirements.

Projected Job Growth and Job Openings by Education and Training Requirements: 2006-2016

Education/Training Requirements	Growth	Percent	Job Openings	Percent
High (Associate's degree or higher)	129,800	48.9	36,550	27.7
Moderate (Long-term on-the-job training, work experience or post-secondary vocational training)	49,600	18.7	24,450	18.5
Low (Short- or Moderate-term on-the-job training)	86,000	32.4	71,100	53.8
Total	265,400	100.0	132,100	100.0

2016 PROJECTIONS

How Many People?

New Jersey's population is projected to near 9,065,100 by 2016, growing by 4.6 percent from 2006 to 2016. This is somewhat slower than the state's growth rate of the 1990s and the projected national growth rate. New Jersey has lagged behind the nation in the rate of population growth since the 1970s. So far in this decade, New Jersey has experienced an acceleration of out-migration to other states combined with a dwindling influx of international immigrants.

The "other races" population group, which is comprised mainly of Asians, but also includes American Indians, Alaska Natives, Hawaiians and other Pacific Islanders, is projected to grow substantially faster (32.6%) than their white (1.2%) and black or African American (5.4%) counterparts. This is a continuation of the 1980s and 1990s trend. "Other Races", however, will still represent less than one-tenth of the state's total population (9.8%) by 2016.

Persons of Hispanic or Latino origin (any race) are projected to increase by 27.9 percent from 2006 to 2016, compared with a mere 0.3 percent increase of the non-Hispanic population. In fact, Hispanics will account for 94 percent of the state's 2006-2016 population growth, while the non-Hispanic white population is projected to decline. Hispanics began to outnumber African Americans earlier this decade and become the state's largest minority group.

As the "baby boomers" (persons born between 1946 and 1964) age, the 50+ population will increase substantially faster than their younger counterparts from 2006 to 2016. The "baby booms" have been the state's largest birth cohort since the 1960s. However, they are projected to be outnumbered somewhat by their children's generation - the "baby boom echo" cohort (persons born between 1977 and 1994) by 2016.

2016 PROJECTIONS

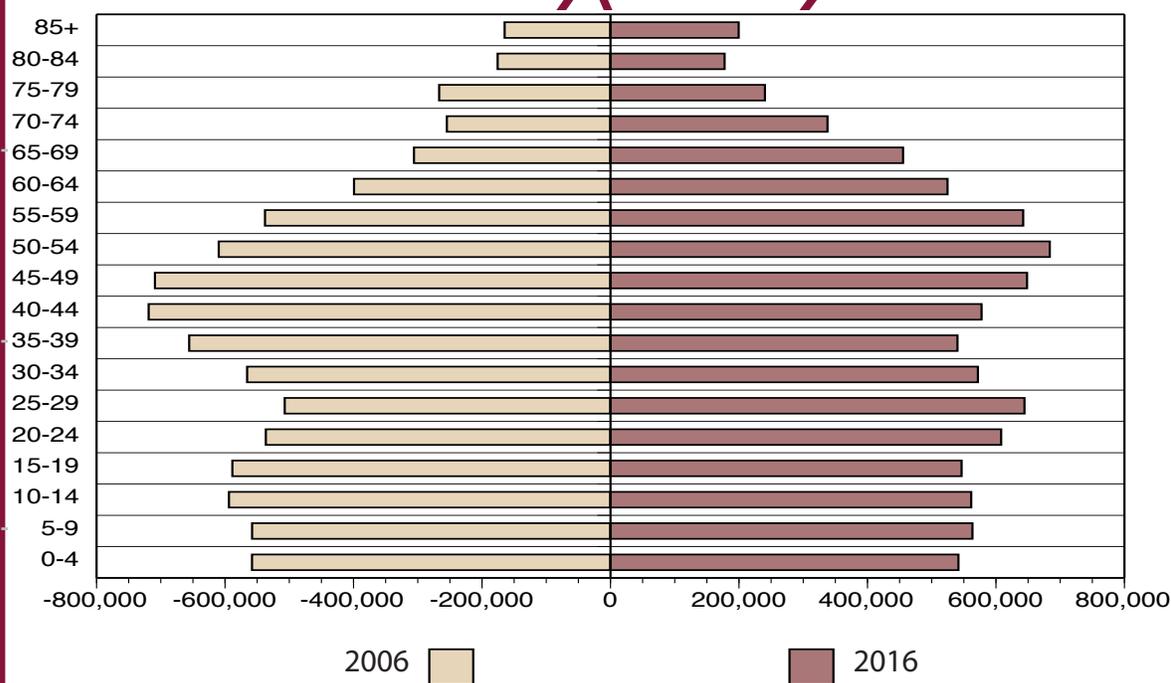
How Many People?

The number of children (under 18) is projected to decrease slightly (-3.3%) in New Jersey between 2006 and 2016 when the children of the “baby bust” cohort will become the major source of the school age children (5–17) since the “baby bust” cohort (persons born between 1965 and 1976) was relatively smaller in size than the “baby boom” generation. The “baby bust” generation accounted for approximately one-sixth (17%) of the state’s total population, according to the 2000 Census.

At a projected 25.0 percent rate of growth, the state’s senior citizens will exceed 1.4 million by 2016. Their share of the state’s total population will grow from 13.0 percent in 2006 to 15.6 percent in 2016.

New Jersey’s sex ratio (number of males per 100 females) will increase from 95.5 in 2006 to 96 in 2016, as the male population is projected to grow somewhat faster than their female counterpart.

New Jersey Population By Age: 2006-2016



2016 PROJECTIONS

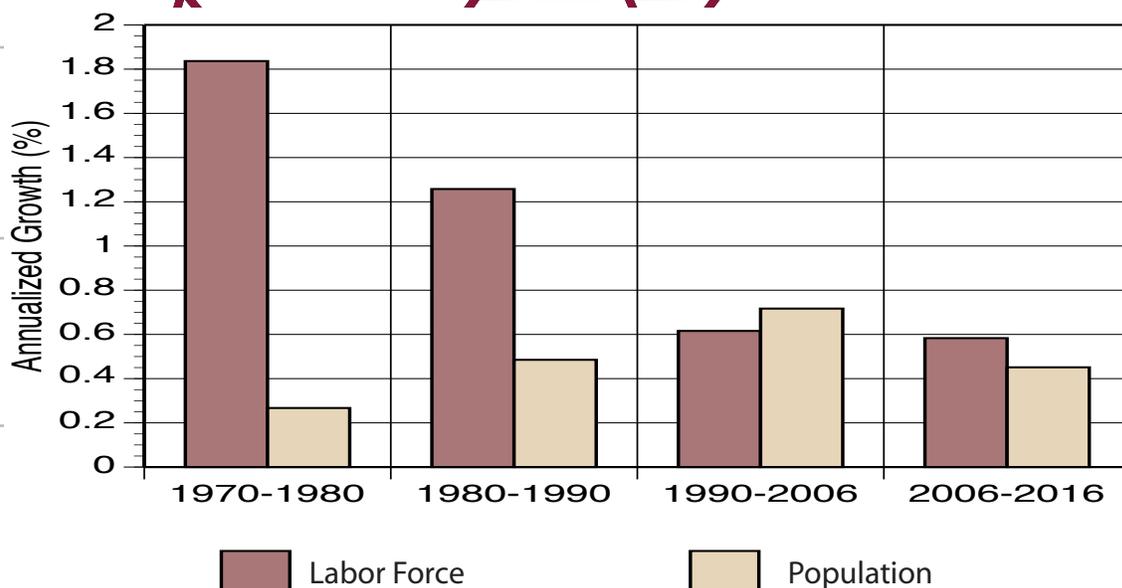
Who Will be Available for the Jobs?

New Jersey's labor force is projected to total 4,761,800 in 2016. This is 6.6 percent greater than the number of persons in the labor force in 2006, and represents a faster growth than the 1990s, but slower than growth during the 1970s and 1980s.

Substantial labor force growth in the 1970s and 1980s was due largely to the "baby boomers" coming of working age. The new entrants to labor force during the 1990s were derived mainly from the "baby bust" cohort leading to the slower labor force growth during the decade. As the "baby boom echo" generation starts to enter the state's work force between 2006 and 2016, the labor force will grow faster than the population again.

Approximately 74.0 percent of the state's projected labor force growth will come from the 45-64 age group, while the 65-and-over group will have the fastest growth rate (33.0%) between 2006 and 2016 – a reflection of the maturing of the "baby boomers". More than one-fifth (21.6%) of the state's labor force will be "older workers" (55 years or older) in 2016.

Population and Labor Force Growth Rates, New Jersey: 1970-2016



2016 PROJECTIONS

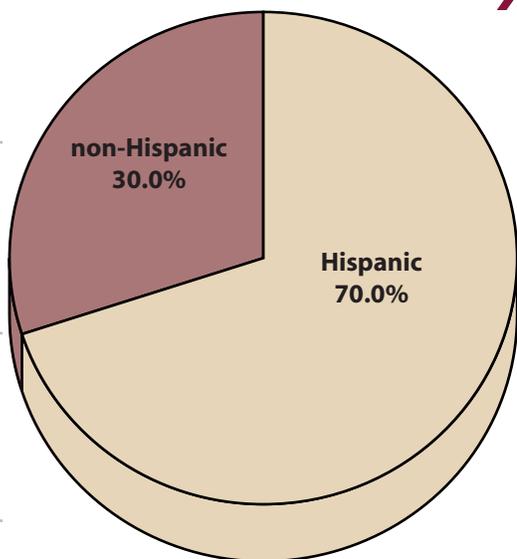
Who Will be Available for the Jobs?

As in the 1980s and 1990s, persons of "other races" are projected to continue to lead the state's labor force growth, and account for about 44.0 percent of New Jersey's 2006-2016 total labor force growth. Their share in the state's labor force will increase to 10.0 percent in 2016, up from 8.0 percent in 2006.

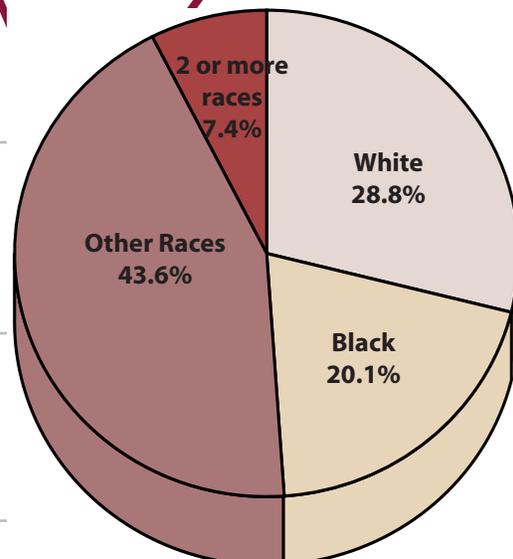
Parallel to the projected population growth pattern, New Jersey's labor force growth will also be dominated by persons of Hispanic origin. They are projected to account for 70.0 percent of the state's labor force growth between 2006 and 2016, while the number of labor force participants who are white, non-Hispanic are projected to decline. After increasing by 27.0 percent during the 10-year period, Hispanic's share in the state's labor force will increase from 15.5 percent in 2006 to 18.6 percent in 2016.

Labor Force Growth by Race, Sex and Hispanic Origin: 2006-2016

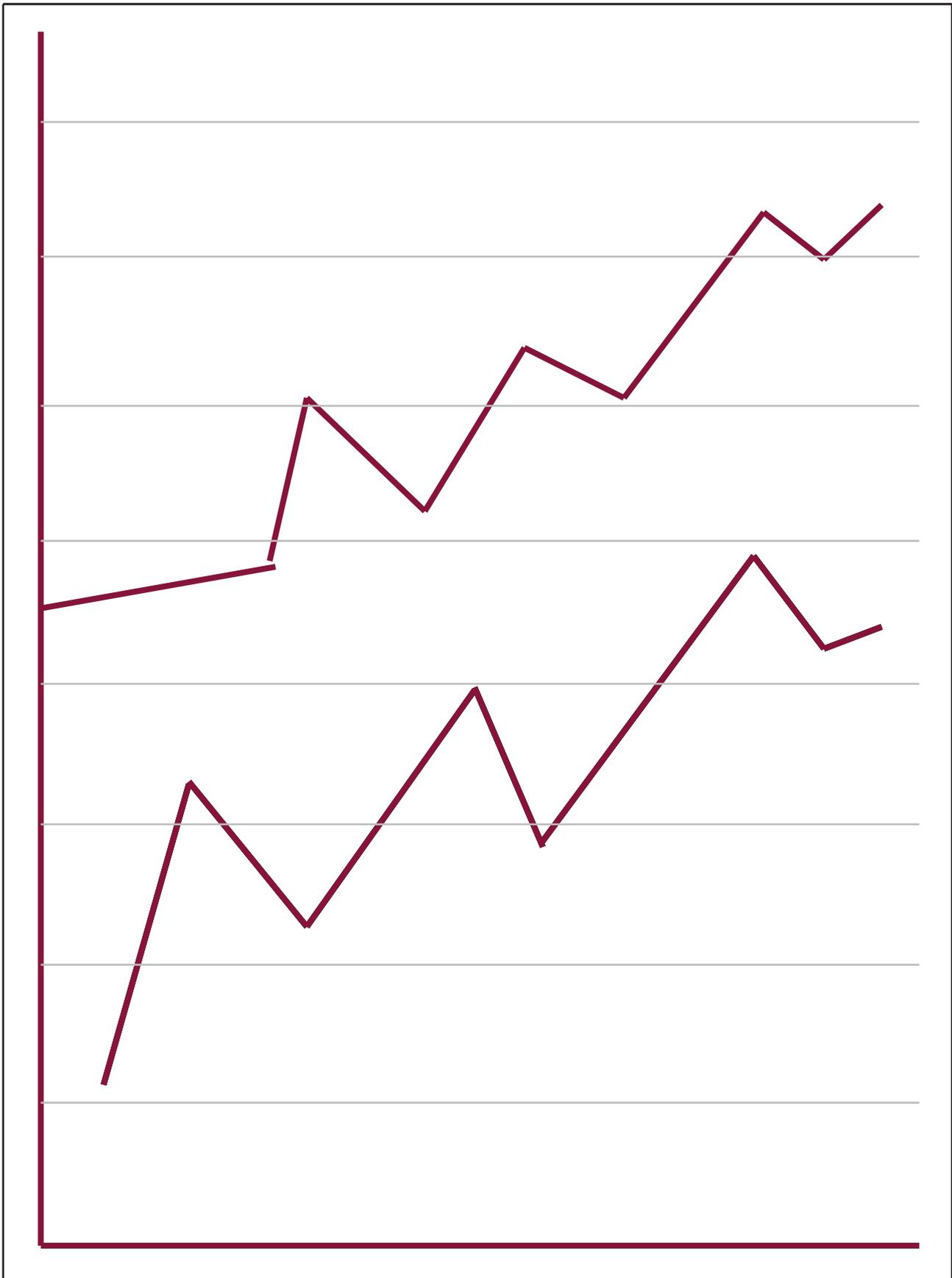
By Hispanic Origin



By Race



2016 PROJECTIONS



2016 PROJECTIONS



2016 PROJECTIONS

Table 1

Employment by Major Industry Category, New Jersey: 2006-2016

Industry Title	2006		2016		Change: 2006-2016		
	Number	Percent	Number	Percent	Percent		
					Number	Annual	Total
Total Nonfarm	4,071,000	100.0	4,325,100	100.0	254,100	0.6	6.2
Goods Producing	500,600	12.3	450,000	10.4	-50,600	-1.1	-10.1
Natural Resources and Mining	1,700	0.0	1,800	0.0	100	0.6	5.9
Construction	175,000	4.3	186,800	4.3	11,800	0.7	6.7
Manufacturing	323,900	8.0	261,400	6.0	-62,500	-2.1	-19.3
Service-Providing	3,570,400	87.7	3,875,100	89.6	304,700	0.8	8.5
Private Service-Providing	2,923,100	71.8	3,213,400	74.3	290,300	1.0	9.9
Trade, Transportation and Utilities	876,000	21.5	895,900	20.7	19,900	0.2	2.3
Information	97,400	2.4	88,400	2.0	-9,000	-1.0	-9.2
Financial Activities	279,400	6.9	305,100	7.1	25,700	0.9	9.2
Professional and Business Services	602,700	14.8	680,900	15.7	78,200	1.2	13.0
Education and Health Services	568,600	14.0	683,200	15.8	114,600	1.9	20.2
Leisure and Hospitality	338,600	8.3	376,800	8.7	38,200	1.1	11.3
Other Services (Except Government)	160,400	3.9	183,100	4.2	22,700	1.3	14.2
Government	647,300	15.9	661,700	15.3	14,400	0.2	2.2

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: The industry employment estimates, projections, and projected employment change, which are based on nonfarm payroll employment will not match the occupational data which also include self-employed and unpaid family workers. Totals may not add due to rounding. Employment data are rounded to the nearest hundred. Percentages and percent changes are based on unrounded data.

Table 2

Employment by Major Industry Category, United States: 2006-2016

Industry Title	2006		2016		Change: 2006-2016		
	Number	Percent	Number	Percent	Percent		
					Number	Annual	Total
Total Nonfarm	136,912	100.0	151,962	100.0	15,050	1.0	11.0
Goods Producing	22,504	16.4	21,772	14.3	-732	-0.3	-3.3
Natural Resources and Mining	618	0.5	608	0.4	-10	-0.2	-1.6
Construction	7688	5.6	8,469	5.6	780	1.0	10.1
Manufacturing	14,197	10.4	12,694	8.4	-1,502	-1.1	-10.6
Service-Providing	114,407	83.6	130,189	85.7	15,782	1.3	13.8
Private Service-Providing	92,417	67.5	106,867	70.3	14,450	1.5	15.6
Trade, Transportation and Utilities	26,231	19.2	27,812	18.3	1,580	0.6	6.0
Information	3,054	2.2	3,266	2.1	211	0.7	6.9
Financial Activities	8,363	6.1	9,570	6.3	1,206	1.4	14.4
Professional and Business Services	17,551	12.8	21,643	14.2	4,092	2.1	23.3
Education and Health Services	17,838	13.0	22,481	14.8	4,643	2.3	26.0
Leisure and Hospitality	13,143	9.6	15,016	9.9	1,873.3	1.3	14.3
Other Services (Except Government)	6,234	4.6	7,077	4.7	842	1.3	13.5
Government	21,990	16.1	23,321	15.3	1,331	0.6	6.1

Source: US Bureau of Labor Statistics.

Notes: Totals may not add due to rounding. Employment data are rounded to the nearest thousand. Percentages and percent changes are based on unrounded data.

2016 PROJECTIONS

Table 3

Employment by Major Occupational Category, New Jersey: 2006-2016

Occupational Category	2006		2016		Change: 2006-2016	
	Number	Percent	Number	Percent	Number	Percent
Total, All Occupations *	4,387,800	100.0	4,653,200	100.0	265,400	6.0
Management , Business and Financial Occupations	465,500	10.6	498,500	10.7	33,000	7.1
Professional and Related Occupations	914,100	20.8	1,025,700	22.0	111,600	12.2
Service Occupations	832,600	19.0	943,400	20.3	110,800	13.3
Sales and Related Occupations	472,500	10.8	488,700	10.5	16,200	3.4
Office and Administrative Support Occupations	798,200	18.2	808,300	17.4	10,100	1.3
Farming, Fishing, and Forestry Occupations	4,700	0.1	5,500	0.1	800	17.0
Construction and Extraction Occupations	174,800	4.0	183,900	4.0	9,100	5.2
Installation, Maintenance, and Repair Occupations	161,300	3.7	167,800	3.6	6,500	4.0
Production Occupations	232,600	5.3	204,000	4.4	-28,600	-12.3
Transportation and Material Moving Occupations	331,600	7.6	327,400	7.0	-4,200	-1.3

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: *Occupational data include estimates of self-employed and unpaid family workers and are not directly comparable to the industry employment total. Totals may not add due to rounding. Employment data are rounded to the nearest fifty. Percentages are based on unrounded data.

Table 4

Annual Average Job Openings by Occupational Category, New Jersey: 2006-2016

Occupational Category	2006-2016 Annual Average Job Openings	
	Number	Percent
Total, All Occupations *	132,100	100.0
Management , Business and Financial Occupations	12,540	9.5
Professional and Related Occupations	30,140	22.8
Service Occupations	31,520	23.9
Sales and Related Occupations	16,320	12.4
Office and Administrative Support Occupations	20,890	15.8
Farming, Fishing, and Forestry Occupations	210	0.2
Construction and Extraction Occupations	4,000	3.0
Installation, Maintenance, and Repair Occupations	3,450	2.6
Production Occupations	4,700	3.6
Transportation and Material Moving Occupations	8,350	6.3

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: *Occupational data include estimates of self-employed and unpaid family workers and are not directly comparable to the industry employment total. Totals may not add due to rounding. Employment data are rounded to the nearest fifty. Percentages are based on unrounded data.

2016 PROJECTIONS

Table 5

Projections for the 25 High Skill Requirement Occupations With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change: 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total High Requirements	1,168,700	26.6	1,298,900	27.9	130,200	11.1	36,550	
Registered Nurses	84,700	1.9	98,600	2.1	13,900	16.4	2,780	\$70,900
Elementary School Teachers, Except Special Education	50,100	1.1	55,300	1.2	5,200	10.4	1,620	\$57,980
Secondary School Teachers, Except Special and Vocational Education	38,500	0.9	39,600	0.9	1,100	2.9	1,250	\$61,640
Accountants and Auditors	41,700	1.0	46,100	1.0	4,400	10.6	1,170	\$74,040
Computer Software Engineers, Applications	22,300	0.5	30,700	0.7	8,400	37.7	1,170	\$89,590
General and Operations Managers	41,600	0.9	40,300	0.9	-1,300	-3.1	1,000	\$144,350
Computer Systems Analysts	18,500	0.4	22,900	0.5	4,400	23.8	930	\$85,400
Middle School Teachers, Except Special and Vocational Education	29,700	0.7	32,100	0.7	2,400	8.1	890	\$59,120
Lawyers	28,300	0.6	31,200	0.7	2,900	10.2	820	\$120,060
Computer Support Specialists	16,800	0.4	17,900	0.4	1,100	6.5	630	\$49,700
Management Analysts	22,700	0.5	24,600	0.5	1,900	8.4	580	\$90,610
Network Systems and Data Communications Analysts	9,000	0.2	12,700	0.3	3,700	41.1	550	\$82,670
Network and Computer Systems Administrators	11,400	0.3	13,800	0.3	2,400	21.1	500	\$76,530
Securities, Commodities, and Financial Services Sales Agents	13,700	0.3	15,200	0.3	1,500	10.9	500	\$102,520
Computer Programmers	22,000	0.5	20,900	0.4	-1,100	-5.0	460	\$83,000
Computer Software Engineers, Systems Software	13,400	0.3	15,800	0.3	2,400	17.9	440	\$98,640
Financial Managers	20,200	0.5	21,500	0.5	1,300	6.4	430	\$124,430
Legal Secretaries	14,900	0.3	16,500	0.4	1,600	10.7	400	\$43,150
Special Education Teachers, Pre-school, Kindergarten, and Elementary School	10,000	0.2	11,600	0.2	1,600	16.0	380	\$56,780
Insurance Sales Agents	12,300	0.3	13,200	0.3	900	7.3	350	\$75,030
Sales Managers	12,900	0.3	13,500	0.3	600	4.7	340	\$120,740
Computer and Information Systems Managers	13,000	0.3	14,200	0.3	1,200	9.2	330	\$131,800
Child, Family, and School Social Workers	8,700	0.2	10,100	0.2	1,400	16.1	320	\$52,880
Construction Managers	12,000	0.3	13,200	0.3	1,200	10.0	310	\$107,640
Education Administrators, Elementary and Secondary School	9,300	0.2	9,700	0.2	400	4.3	300	\$99,740
High, Other	541,500	12.3	599,900	12.9	58,400	10.8	16,990	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked based on total job openings. High skill requirement is defined as an Associate's degree or higher.

2016 PROJECTIONS

Table 6

Projections for the 25 Moderate Skill Requirement Occupations With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change: 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total Moderate Requirements	946,200	21.6	995,900	21.4	49,700	5.3	24,550	
Nursing Aides, Orderlies, and Attendants	46,000	1.0	52,600	1.1	6,600	14.3	1,070	\$25,990
First-Line Supervisors/Managers of Retail Sales Workers	46,300	1.1	47,200	1.0	900	1.9	1,060	\$44,480
First-Line Supervisors/Managers of Office and Administrative Support Workers	47,500	1.1	47,900	1.0	400	0.8	1,030	\$52,110
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	45,600	1.0	45,800	1.0	200	0.4	1,020	\$70,880
Hairdressers, Hairstylists, and Cosmetologists	29,100	0.7	33,500	0.7	4,400	15.1	790	\$30,540
Licensed Practical and Licensed Vocational Nurses	18,700	0.4	21,400	0.5	2,700	14.4	780	\$48,750
Police and Sheriff's Patrol Officers	25,300	0.6	26,000	0.6	700	2.8	750	\$72,510
Cooks, Restaurant	18,100	0.4	19,800	0.4	1,700	9.4	660	\$24,630
Automotive Service Technicians and Mechanics	22,000	0.5	24,100	0.5	2,100	9.5	650	\$38,840
Executive Secretaries and Administrative Assistants	27,100	0.6	28,900	0.6	1,800	6.6	620	\$51,110
Carpenters	30,500	0.7	31,900	0.7	1,400	4.6	560	\$52,650
Electricians	17,100	0.4	17,900	0.4	800	4.7	520	\$62,490
Preschool Teachers, Except Special Education	13,700	0.3	16,600	0.4	2,900	21.2	510	\$33,330
Fitness Trainers and Aerobics Instructors	9,400	0.2	11,500	0.2	2,100	22.3	390	\$39,730
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	14,600	0.3	15,100	0.3	500	3.4	390	\$64,840
First-Line Supervisors/Managers of Food Preparation and Serving Workers	20,500	0.5	22,700	0.5	2,200	10.7	380	\$36,460
First-Line Supervisors/Managers of Personal Service Workers	11,900	0.3	13,100	0.3	1,200	10.1	380	\$43,870
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	14,700	0.3	15,300	0.3	600	4.1	380	\$84,090
Claims Adjusters, Examiners, and Investigators	12,100	0.3	12,700	0.3	600	5.0	370	\$61,170
Plumbers, Pipefitters, and Steamfitters	13,000	0.3	14,000	0.3	1,000	7.7	370	\$58,340
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	18,800	0.4	19,800	0.4	1,000	5.3	360	\$71,230
First-Line Supervisors/Managers of Non-Retail Sales Workers	21,600	0.5	21,200	0.5	-400	-1.9	310	\$97,170
First-Line Supervisors/Managers of Production and Operating Workers	17,900	0.4	15,900	0.3	-2,000	-11.2	300	\$57,000
Self-Enrichment Education Teachers	9,000	0.2	10,900	0.2	1,900	21.1	290	\$49,820
Coaches and Scouts	6,100	0.1	6,900	0.1	800	13.1	240	\$36,900
Moderate, Other	340,500	7.8	351,000	7.5	10,500	3.1	8,960	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked based on total job openings. Moderate skill requirement is defined as long-term on-the-job training, work experience or post secondary/vocational training.

2016 PROJECTIONS

Table 7

Projections for the 25 Low Skill Requirement Occupations With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change: 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total Low Requirements	2,273,600	51.8	2,359,600	50.7	86,000	3.8	71,300	
Cashiers	107,000	2.4	104,900	2.3	-2,100	-2.0	5,090	\$19,550
Retail Salespersons	122,700	2.8	131,300	2.8	8,600	7.0	4,640	\$25,920
Waiters and Waitresses	56,000	1.3	61,600	1.3	5,600	10.0	3,600	\$22,780
Customer Service Representatives	64,800	1.5	76,100	1.6	11,300	17.4	2,930	\$34,250
Laborers and Freight, Stock, and Material Movers, Hand	80,900	1.8	76,800	1.7	-4,100	-5.1	2,590	\$25,090
Office Clerks, General	90,100	2.1	96,400	2.1	6,300	7.0	2,280	\$27,710
Combined Food Preparation and Serving Workers, Including Fast Food	64,400	1.5	74,400	1.6	10,000	15.5	2,220	\$18,650
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	74,800	1.7	82,600	1.8	7,800	10.4	2,220	\$25,500
Child Care Workers	45,300	1.0	53,600	1.2	8,300	18.3	2,140	\$21,460
Stock Clerks and Order Fillers	58,500	1.3	52,500	1.1	-6,000	-10.3	1,390	\$24,140
Bookkeeping, Accounting, and Auditing Clerks	60,300	1.4	64,700	1.4	4,400	7.3	1,380	\$37,490
Secretaries, Except Legal, Medical, and Executive	83,300	1.9	80,600	1.7	-2,700	-3.2	1,330	\$34,750
Receptionists and Information Clerks	31,200	0.7	35,800	0.8	4,600	14.7	1,220	\$25,800
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	15,400	0.4	16,700	0.4	1,300	8.4	1,200	\$19,360
Teacher Assistants	44,500	1.0	48,800	1.0	4,300	9.7	1,150	\$24,280
Security Guards	41,000	0.9	43,900	0.9	2,900	7.1	1,120	\$26,550
Landscaping and Groundskeeping Workers	36,600	0.8	42,700	0.9	6,100	16.7	1,090	\$26,640
Medical Secretaries	31,000	0.7	36,800	0.8	5,800	18.7	1,080	\$33,860
Truck Drivers, Heavy and Tractor-Trailer	48,100	1.1	49,700	1.1	1,600	3.3	1,020	\$41,400
Home Health Aides	19,800	0.5	28,100	0.6	8,300	41.9	1,010	\$23,120
Tellers	17,600	0.4	20,000	0.4	2,400	13.6	1,010	\$24,440
Food Preparation Workers	17,000	0.4	19,600	0.4	2,600	15.3	860	\$20,900
Bartenders	15,500	0.4	17,100	0.4	1,600	10.3	730	\$24,580
Personal and Home Care Aides	12,000	0.3	16,800	0.4	4,800	40.0	690	\$25,480
Maids and Housekeeping Cleaners	24,800	0.6	26,900	0.6	2,100	8.5	680	\$21,200
Low, Other	1,011,000	23.0	1,001,200	21.5	-9,800	-1.0	26,630	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked based on total job openings. Low skill requirement is defined as moderate or short-term on-the-job training.

2016 PROJECTIONS

Table 8

Projections for the 25 High Wage Occupations (over \$60,000) With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total High (over \$60,000)	1,169,200	26.6	1,281,000	27.5	111,800	9.6	35,250	
Registered Nurses	84,700	1.9	98,600	2.1	13,900	16.4	2,780	\$70,900
Secondary School Teachers, Except Special and Vocational Education	38,500	0.9	39,600	0.9	1,100	2.9	1,250	\$61,640
Computer Software Engineers, Applications	22,300	0.5	30,700	0.7	8,400	37.7	1,170	\$89,590
Accountants and Auditors	41,700	1.0	46,100	1.0	4,400	10.6	1,170	\$74,040
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	45,600	1.0	45,800	1.0	200	0.4	1,020	\$70,880
General and Operations Managers	41,600	0.9	40,300	0.9	-1,300	-3.1	1,000	\$144,350
Computer Systems Analysts	18,500	0.4	22,900	0.5	4,400	23.8	930	\$85,400
Lawyers	28,300	0.6	31,200	0.7	2,900	10.2	820	\$120,060
Police and Sheriff's Patrol Officers	25,300	0.6	26,000	0.6	700	2.8	750	\$72,510
Management Analysts	22,700	0.5	24,600	0.5	1,900	8.4	580	\$90,610
Network Systems and Data Communications Analysts	9,000	0.2	12,700	0.3	3,700	41.1	550	\$82,670
Electricians	17,100	0.4	17,900	0.4	800	4.7	520	\$62,490
Securities, Commodities, and Financial Services Sales Agents	13,700	0.3	15,200	0.3	1,500	10.9	500	\$102,520
Network and Computer Systems Administrators	11,400	0.3	13,800	0.3	2,400	21.1	500	\$76,530
Computer Programmers	22,000	0.5	20,900	0.4	-1,100	-5.0	460	\$83,000
Computer Software Engineers, Systems Software	13,400	0.3	15,800	0.3	2,400	17.9	440	\$98,640
Financial Managers	20,200	0.5	21,500	0.5	1,300	6.4	430	\$124,430
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	14,600	0.3	15,100	0.3	500	3.4	390	\$64,840
Correctional Officers and Jailers	11,800	0.3	13,000	0.3	1,200	10.2	390	\$60,920
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	14,700	0.3	15,300	0.3	600	4.1	380	\$84,090
Claims Adjusters, Examiners, and Investigators	12,100	0.3	12,700	0.3	600	5.0	370	\$61,170
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	18,800	0.4	19,800	0.4	1,000	5.3	360	\$71,230
Insurance Sales Agents	12,300	0.3	13,200	0.3	900	7.3	350	\$75,030
Sales Managers	12,900	0.3	13,500	0.3	600	4.7	340	\$120,740
Computer and Information Systems Managers	13,000	0.3	14,200	0.3	1,200	9.2	330	\$131,800
High, Other	519,400	11.8	565,900	12.2	46,500	9.0	15,330	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked first on total job openings and then by mean wage.

2016 PROJECTIONS

Table 9

Projections for the 25 Moderate Wage Occupations (\$30,000-\$60,000) With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change: 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total Moderate (\$30,000 to \$60,000)	1,716,500	39.1	1,789,200	38.5	72,700	4.2	44,090	
Customer Service Representatives	64,800	1.5	76,100	1.6	11,300	17.4	2,930	\$34,250
Elementary School Teachers, Except Special Education	50,100	1.1	55,300	1.2	5,200	10.4	1,620	\$57,980
Bookkeeping, Accounting, and Auditing Clerks	60,300	1.4	64,700	1.4	4,400	7.3	1,380	\$37,490
Secretaries, Except Legal, Medical, and Executive	83,300	1.9	80,600	1.7	-2,700	-3.2	1,330	\$34,750
Medical Secretaries	31,000	0.7	36,800	0.8	5,800	18.7	1,080	\$33,860
First-Line Supervisors/Managers of Retail Sales Workers	46,300	1.1	47,200	1.0	900	1.9	1,060	\$44,480
First-Line Supervisors/Managers of Office and Administrative Support Workers	47,500	1.1	47,900	1.0	400	0.8	1,030	\$52,110
Truck Drivers, Heavy and Tractor-Trailer	48,100	1.1	49,700	1.1	1,600	3.3	1,020	\$41,400
Middle School Teachers, Except Special and Vocational Education	29,700	0.7	32,100	0.7	2,400	8.1	890	\$59,120
Hairdressers, Hairstylists, and Cosmetologists	29,100	0.7	33,500	0.7	4,400	15.1	790	\$30,540
Licensed Practical and Licensed Vocational Nurses	18,700	0.4	21,400	0.5	2,700	14.4	780	\$48,750
Medical Assistants	12,100	0.3	17,200	0.4	5,100	42.1	660	\$31,810
Automotive Service Technicians and Mechanics	22,000	0.5	24,100	0.5	2,100	9.5	650	\$38,840
Shipping, Receiving, and Traffic Clerks	27,100	0.6	26,300	0.6	-800	-3.0	650	\$31,230
Computer Support Specialists	16,800	0.4	17,900	0.4	1,100	6.5	630	\$49,700
Truck Drivers, Light or Delivery Services	32,000	0.7	32,600	0.7	600	1.9	630	\$32,180
Executive Secretaries and Administrative Assistants	27,100	0.6	28,900	0.6	1,800	6.6	620	\$51,110
Carpenters	30,500	0.7	31,900	0.7	1,400	4.6	560	\$52,650
Preschool Teachers, Except Special Education	13,700	0.3	16,600	0.4	2,900	21.2	510	\$33,330
Industrial Truck and Tractor Operators	18,300	0.4	17,200	0.4	-1,100	-6.0	460	\$31,340
Dental Assistants	9,300	0.2	12,100	0.3	2,800	30.1	440	\$35,680
Telemarketers	12,500	0.3	10,100	0.2	-2,400	-19.2	440	\$33,410
Legal Secretaries	14,900	0.3	16,500	0.4	1,600	10.7	400	\$43,150
Fitness Trainers and Aerobics Instructors	9,400	0.2	11,500	0.2	2,100	22.3	390	\$39,730
Special Education Teachers, Preschool, Kindergarten and Elementary School	10,000	0.2	11,600	0.2	1,600	16.0	380	\$56,780
Moderate, Other	935,500	21.3	953,000	20.5	17,500	1.9	22,700	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked first on total job openings and then by mean wage.

2016 PROJECTIONS

Table 10

Projections for the 25 Low Wage Occupations (under \$30,000) With the Most Average Annual Job Openings: 2006-2016

Occupational Title	2006		2016		Change: 2006-2016		Total Job Openings	Mean Wage
	Number	Percent of Total	Number	Percent of Total	Number	Percent		
Total Low (under \$30,000)	1,468,900	33.5	1,547,500	33.3	78,600	5.4	52,080	
Cashiers	107,000	2.4	104,900	2.3	-2,100	-2.0	5,090	\$19,550
Retail Salespersons	122,700	2.8	131,300	2.8	8,600	7.0	4,640	\$25,920
Waiters and Waitresses	56,000	1.3	61,600	1.3	5,600	10.0	3,600	\$22,780
Laborers and Freight, Stock, and Material Movers, Hand	80,900	1.8	76,800	1.7	-4,100	-5.1	2,590	\$25,090
Office Clerks, General	90,100	2.1	96,400	2.1	6,300	7.0	2,280	\$27,710
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	74,800	1.7	82,600	1.8	7,800	10.4	2,220	\$25,500
Combined Food Preparation and Serving Workers, Including Fast Food	64,400	1.5	74,400	1.6	10,000	15.5	2,220	\$18,650
Child Care Workers	45,300	1.0	53,600	1.2	8,300	18.3	2,140	\$21,460
Stock Clerks and Order Fillers	58,500	1.3	52,500	1.1	-6,000	-10.3	1,390	\$24,140
Receptionists and Information Clerks	31,200	0.7	35,800	0.8	4,600	14.7	1,220	\$25,800
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	15,400	0.4	16,700	0.4	1,300	8.4	1,200	\$19,360
Teacher Assistants	44,500	1.0	48,800	1.0	4,300	9.7	1,150	\$24,280
Security Guards	41,000	0.9	43,900	0.9	2,900	7.1	1,120	\$26,550
Landscaping and Groundskeeping Workers	36,600	0.8	42,700	0.9	6,100	16.7	1,090	\$26,640
Nursing Aides, Orderlies, and Attendants	46,000	1.0	52,600	1.1	6,600	14.3	1,070	\$25,990
Tellers	17,600	0.4	20,000	0.4	2,400	13.6	1,010	\$24,440
Home Health Aides	19,800	0.5	28,100	0.6	8,300	41.9	1,010	\$23,120
Food Preparation Workers	17,000	0.4	19,600	0.4	2,600	15.3	860	\$20,900
Bartenders	15,500	0.4	17,100	0.4	1,600	10.3	730	\$24,580
Personal and Home Care Aides	12,000	0.3	16,800	0.4	4,800	40.0	690	\$25,480
Maids and Housekeeping Cleaners	24,800	0.6	26,900	0.6	2,100	8.5	680	\$21,200
Cooks, Restaurant	18,100	0.4	19,800	0.4	1,700	9.4	660	\$24,630
Counter and Rental Clerks	12,400	0.3	14,100	0.3	1,700	13.7	640	\$27,470
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	7,500	0.2	8,300	0.2	800	10.7	590	\$19,400
Dishwashers	11,300	0.3	12,500	0.3	1,200	10.6	580	\$18,030
Low, Other	398,500	9.1	389,700	8.4	-8,800	-2.2	11,610	

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: Occupations are ranked first on total job openings and then by mean wage.

2016 PROJECTIONS

Table 11

Projections of Population by Age, Race, Sex and Hispanic Origin, New Jersey: 2006-2016

	2006		2016		Change: 2006–2016	
	Number	Percent	Number	Percent	Number	Percent
Total Population	8,666,100	100.0	9,065,100	100.0	399,000	4.6
by Age						
Under 18	2,062,900	23.8	1,994,400	22.0	-68,500	-3.3
18 – 34	1,844,600	21.3	2,042,900	22.5	198,300	10.8
35 – 49	2,083,800	24.0	1,766,100	19.5	-317,700	-15.2
50 – 64	1,546,900	17.9	1,850,800	20.4	303,900	19.6
65 & over	1,127,900	13.0	1,410,800	15.6	282,900	25.1
by Sex						
Male	4,234,400	48.9	4,440,900	49.0	206,500	4.9
Female	4,431,700	51.1	4,624,300	51.0	192,600	4.3
by Race						
White	6,632,400	76.5	6,709,400	74.0	77,000	1.2
Black	1,255,700	14.5	1,323,400	14.6	67,700	5.4
Other Races	667,000	7.7	884,300	9.8	217,300	32.6
Multiracial	111,000	1.3	148,000	1.6	37,000	33.3

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: The "Other Races" include Asian, American Indian, Alaska Native, Hawaiian, Other Pacific Islander. "Multiracial" refers to persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

Table 12

Projections of Population by Age, Race, Sex and Hispanic Origin, United States: 2006-2016

	2006		2016		Change: 2006–2016	
	Number	Percent	Number	Percent	Number	Percent
Total Population	298,217,000	100.0	325,063,000	100.0	26,846,000	9.0
by Age						
Under 18	60,812,000	20.4	65,451,000	20.1	4,639,000	7.6
18 – 34	62,637,000	21.0	64,374,000	19.8	1,737,000	2.8
35 – 49	62,785,000	21.1	62,842,000	19.3	57,000	0.1
50 – 64	74,787,000	25.1	84,194,000	25.9	9,407,000	12.6
65 & over	37,196,000	12.5	48,202,000	14.8	11,006,000	29.6
by Sex						
Male	151,752,000	50.9	165,241,000	50.8	13,489,000	8.9
Female	146,465,000	49.1	159,821,000	49.2	13,356,000	9.1
by Race						
White	238,586,000	80.0	254,421,000	78.3	15,835,000	6.6
Black	38,525,000	12.9	43,419,000	13.4	4,894,000	12.7
Other Races	12,779,000	4.3	16,474,000	5.1	3,695,000	28.9
Multiracial	8,327,000	2.8	10,749,000	3.3	2,422,000	29.1
Hispanic	43,019,000	14.4	54,851,000	16.9	11,832,000	27.5

Source: U.S. Bureau of the Census.

Notes: "Other Races" includes Asian, American Indian, Alaska Native, Hawaiian, Other Pacific Islander. "Multiracial" refers to persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

2016 PROJECTIONS

Table 13

Projections of Civilian Labor Force by Age, Race, Sex and Hispanic Origin, New Jersey: 2006-2016

	2006		2016		Change: 2006-2016	
	Number	Percent	Number	Percent	Number	Percent
Total Population	4,492,800	100.0	4,761,800	100.0	269,000	6.0
by Age						
16 — 24	602,000	13.4	632,800	13.3	30,800	5.1
25 — 44	1,972,800	43.9	1,955,400	41.1	-17,400	-0.9
45 — 64	1,742,100	38.8	1,940,600	40.8	198,500	11.4
65 & over	176,000	3.9	233,000	4.9	57,000	32.4
by Sex						
Male	2,364,300	52.6	2,520,900	52.9	156,600	6.6
Female	2,128,600	47.4	2,240,900	47.1	112,300	5.3
by Race						
White	3,484,500	77.6	3,562,000	74.8	77,500	2.2
Black	600,800	13.4	655,000	13.8	54,200	9.0
Other Races	361,000	8.0	478,300	10.0	117,300	32.5
Multiracial	46,500	1.0	66,400	1.4	19,900	42.8
Hispanic	698,400	15.5	866,700	10.6	188,300	27.0

Source: New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research.

Notes: The "Other Races" include Asian, American Indian, Alaska Native, Hawaiian, Other Pacific Islander. "Multiracial" refers to persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

Table 14

Projections of Civilian Labor Force by Age, Race, Sex and Hispanic Origin, United States: 2006-2016

	2006		2016		Change: 2006-2016	
	Number	Percent	Number	Percent	Number	Percent
Total Population	151,428,000	100.0	164,232,000	100.0	12,804,000	8.5
by Age						
16 — 24	22,394,000	14.8	20,852,000	12.7	-1,542,000	-6.9
25 — 44	68,421,000	45.2	70,943,000	43.2	2,522,000	3.7
45 — 64	55,129,000	36.4	62,370,000	38.0	7,241,000	13.1
65 & over	5,484,000	3.6	10,066,000	6.1	4,582,000	83.6
by Sex						
Male	81,255,000	53.7	87,781,000	53.4	6,526,000	8.0
Female	70,173,000	46.3	76,450,000	46.6	6,277,000	8.9
by Race						
White	123,834,000	81.1	130,666,000	79.6	6,832,000	5.5
Black	17,314,000	11.4	20,121,000	12.3	2,807,000	16.2
Other Races	3,553,000	2.3	4,704,000	2.9	1,151,000	32.4
Hispanic	20,694,000	13.7	26,889,000	16.4	6,195,000	29.9

Source: U.S. Bureau of Labor Statistics.

Notes: The "Other Races" include Asian, American Indian, Alaska Native, Hawaiian, Other Pacific Islander as well as persons of two or more races. Hispanic origin is not a race. Persons of Hispanic origin may be of any race.

2016 PROJECTIONS

Methodology

The population, labor force, and employment projections presented in this publication are baseline projections. The non-policy oriented projections are neither predictions nor forecasts, but a reflection of long-term economic and demographic trends. These long-term projections were developed using time series, regression models and standard demographic procedures. The projections developed through this process are an extrapolation of longer-term and more current demographic and economic trends into the future. The projections essentially show what the New Jersey population and employment profile would look like if currently identifiable demographic and economic trends continue.

These projections are not goal or policy driven. Future growth will, of course, be affected by any policy changes or initiatives which alter current and future business practices, immigration trends, or labor force participation.

The population projections were developed using the cohort-component method, which projects births, deaths and migration for each age cohort by sex, race and Hispanic origin. Births and deaths were projected based on historical cohort-specific fertility and mortality rates as well as projected national trends.

Projected employment growth was the major determinant of migration in and out of the state for persons under 65 years of age. That is, net migration is projected based on the size of the civilian labor force needed to balance the state's labor market. The future net migration of population 65 years and older was assumed to follow their historical migration pattern.

Projected civilian labor force is obtained by applying the projected age-race-sex-Hispanic origin specific labor force participation rates to the civilian non-institutionalized population aged 16 and over derived from the population projection.

The industry and occupational employment projections use the nonfarm wage salary employment definition of employment. The primary data input is an employment time series, by industry, which goes back to 1990. Staff may opt to use shorter time periods to improve the quality of the projection. Other variables, such as population and national industry employment projections developed by BLS, are also used in the models.

The methodology uses time series and regression models to develop preliminary employment projections by industry. A "final" industry projection is selected based on the statistical properties of the model and the reasonableness of the projection. In evaluating these projections, other forecast and projection models for New Jersey were also considered. The projections were also reviewed by appropriate staff in the Division of Labor Market and Demographic Research for reasonableness and consistency.

2016 PROJECTIONS

Additionally, movement of a large company into or out of the state or a large expansion of an existing company, which cannot be reliably predicted, could greatly alter employment levels within an industry and compromise the projections for that industry. To ensure the most accuracy, estimated employment for large firms are only added to or subtracted from the projected employment levels when there is clear and reliable information that a company opening, expansion, relocation or closing will take place.

The long-term population and labor force projections are coordinated with the industry and occupational employment projections to insure that population, labor force and employment growth are reasonable and consistent.

These projections are not intended to be precise point estimates of employment for each industry. The standard error of estimate and the quality of each projection will vary, depending on the stability and quality of the time series used to develop the projection.

The projections are useful for identifying future population, labor force, and employment growth patterns. There is, however, no attempt to pinpoint the business cycle in these projections. That is, the projections are based on long-term trends. No attempt is made to determine whether the projected year is a peak year or a trough in the business cycle.

Within the context of these projections, employment refers to jobs, both full- and part-time, not the number of employed persons. Since some people work at more than one job, the number of employed persons may actually be less than the number of estimated jobs. Projections are more reliable the broader an industry is defined and less reliable as the industries become increasingly detailed.

The accuracy of the projections for individual industries may be subject to error because of unknown factors and changing trends and technologies that will impact the economy and the demand for labor over the projection period. For example, increases in productivity and new production technologies have significantly reduced the demand for manufacturing workers even though output in many of these industries is still high. As technology changes, the same efficiencies can be achieved with fewer workers. Many firms use retirement within their workforce as a means of downsizing operations over time.

2016 PROJECTIONS

